Orbizal

Minotaur

Space Launch Vehicle

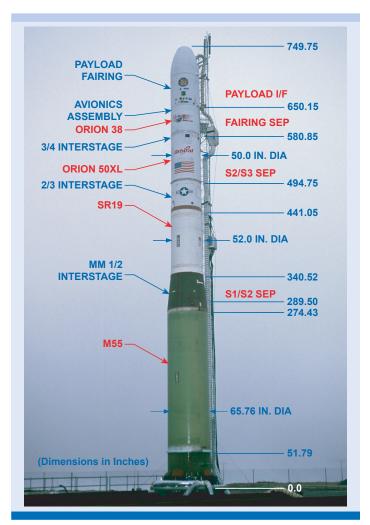
The Minotaur Space Launch Vehicle (SLV) being produced for the U.S. Air Force Space and Missile Systems Center (SMC) under the Orbital/Suborbital Program (OSP) provides a low-cost, reliable solution for launch services of government-sponsored payloads. The vehicle utilizes residual Minuteman II first and second stages (M55A1 and SR19) and the upper two stages (Orion 50XL and Orion 38) of Orbital's Pegasus space launch vehicle.



Success on First Two Missions

Features:

- Inertially guided 4 stage solid rocket propulsion
- Uses flight-proven hardware with demonstrated success record (Minuteman/Pegasus)
- Full payload support including power, telemetry, sequencing, deployment, attitude control and recovery
- Horizontal satellite integration simplifies launch operations
- Portable ground support systems
- 18 month mission response including payload integration and launch by Orbital's experienced launch crews
- Multiple spaceport launch capability (California, Florida, Alaska, Virginia)



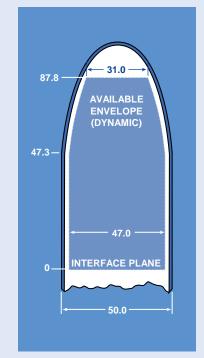
OSP SLV - Minotaur



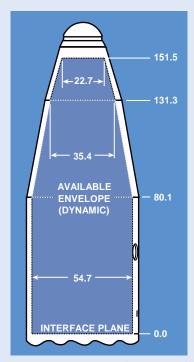
Simplified Horizontal Payload Integration

Performance:

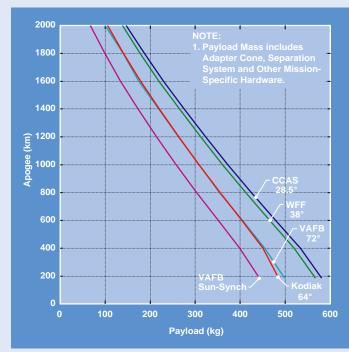
- Flight-verified system performance
- Proven secondary payload capability
- Adaptable to a variety of payloads and orbital requirements with typical accuracy of 33.4 nm (3s), 0±0.1 deg inclination (3s)
- Available add-on Soft Ride for Small Satellites (SRSS) for diminished flight dynamics environments
- Available optional enhancements include:
 - Increased payload volume
 - Insertion accuracy of <10 nm (3s) inclinations <0.05 deg (3s)
 - Conditioned air (Class 10K), tempera ture and humidity control and nitrogen purge
 - Additional payload access panels



Standard 50" Fairing (Minotaur I)



Optional 61" Fairing (Minotaur II)



Minotaur I Payload Capability

Payload Accomodations:

- Standard 50 in. Pegasus-design payload fairing supports dedicated or shared launch missions
- Thermally controlled fairing with Class 100K standard cleanliness
- Well defined launch environments
- Variety of proven payload separation systems available
- Optional 61 in. fairing available



Point of Contact:

For Technical Details, Please Contact Us At:

Phone: 480.814.6566 E-mail: minotaur@orbital.com Web site: http//www.orbital.com

Program Office:

Additional information should be obtained from the USAF OSP Office



USAF SMC Det 12/RP 3548 Aberdeen Avenue S.E. Kirtland AFB, NM 87117-5778 (505) 846-8957 FAX: (505) 846-1349

Orbital Sciences Corporation

Launch Systems Group 3380 South Price Road Chandler, Arizona 85248

